



**Figure S1 The regulation of *L. plantarum*-pMG36e-GLP-1 on the abundance of intestinal beneficial bacteria.** The relative abundance of *Odoribacter* (a), *Bacteroides* (b), *Acetatifactor* (c), *Desulfovibrio* (d), *Lactobacillus* (e), *Akkermansia* (f), *Clostridium XIVa* (g), *Alistipes* (h), *Alloprevotella* (i) and *Clostridium IV* (j) were analyzed. Data are presented as means  $\pm$  SD. One way repeated-measures ANOVA with Tukey's test for multiple comparisons (a-j, respectively); \* $p < 0.05$ , \*\* $p < 0.01$ .